

## Data/Signal Line Protection

## S-PC642C



The Edco PC642 Series surge suppressor is a two-pair (four-wire) module implementing three-stage hybrid technology. This module addresses over-voltage transients with gas tubes and silicon avalanche components. In addition, sneak and fault currents are mitigated with resettable fuses (PTCs). The PTCs increase resistance several orders of magnitude when over-currents exceed safe levels. A normal state resumes when over-currents are removed. The ability to self-restore in this manner significantly increases suppressor performance and survivability.

The Edco PC642 card edge is gold-plated, double sided and is designed to mate with the Edco PCB1B-WKEY gold-plated female terminal connector (sold separately). When snapped together, the data circuits “pass thru” the protector in a serial fashion from the four “Field Side” terminals to the four “Electronics Side” terminals. Terminals 1 or 10 of the PCB1B must be attached to Building-Approved Ground.

PCB1B-WKEY may be ordered along with PC642 module by adding “-KIT” to the end of the module part number (Example: PC642C-036LC-KIT).

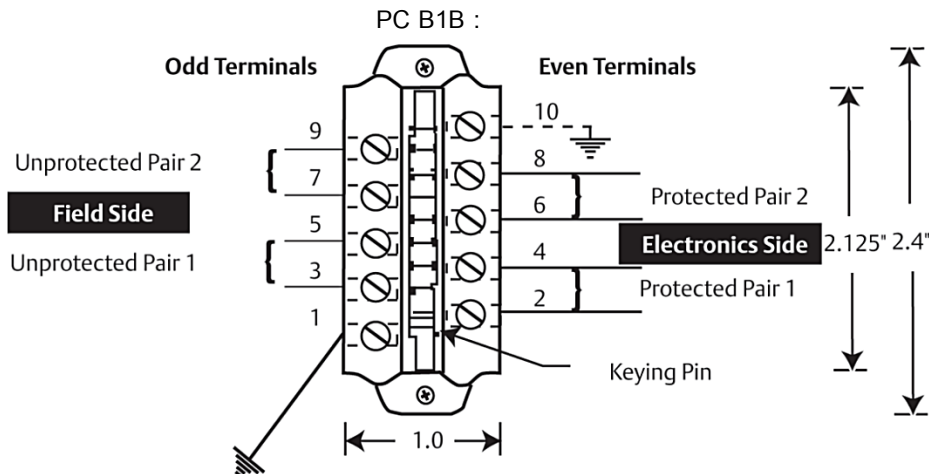
### Features

- Three-stage hybrid protection
- Sneak/fault current protection
- Resettable fuses – PTCs
- Low capacitance option
- Plug-in module
- Requires Edco PCB1B-WKEY base
- Fast response time
- UL listed 497B
- 5 year warranty

|                           |  |
|---------------------------|--|
| Maximum Operating Voltage | 5, 30, 36, 250 VDC   |
| Clamping Voltage          | 8, 36, 43, 300 VDC   |
| Operating Current         | 0.15 A   |
| Peak Surge Current        | 10 kA (8 x 20 $\mu$ s)   |
| Frequency Range           | 0 to 20 MHz  |
| Insertion Loss            | < 0.1 dB at 50 MHz   |
| SPD Technology            | GDT, SAD, w/ Series PTC  |
| Connection Type           | Terminal Block, w/ compression lugs<br>Terminals accept up to 10 AWG |
| Operating Temperature     | -40°C to +85°C   |
| Dimensions (in / mm)      | 2.0 H x 1.0 W x 2.5 L (PC642 + Base)<br>(50.8 x 25.4 x 63.5 mm)      |
| Weight (oz / kg)          | 1 oz (0.03 kg)   |
| Certifications            | UL 497A  |

## Installation Instructions

### Terminal Assignments



Ground Terminal 1 or 10 to Building Approved Ground.

DO NOT daisy chain grounds. NOT intended for shield termination.

Install ground in accordance with all applicable codes.

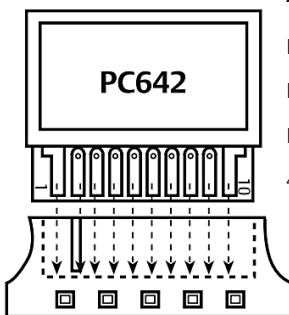
### Read and Understand These Instructions:

These protectors are intended for indoor use on communication loop circuits which have been isolated from the Public Switch Telephone Network.

The communication loop circuits shall not be exposed to accidental contact with the electric light or power conductors.

The protectors shall be installed per the applicable requirements of the National Electric Code, ANSI/NFPA 70.

### Ordering Information



#### Applications

RS485, RS422: PC642C-008LC & PCB1B

RS232: PC642C-020 & PCB1B

E-NET, 10 BASE T: PC642C-030LC & PCB1B

4-20ma: PC642C-036 & PCB1B

#### How to Specify the Appropriate Model

| PC642C -        |       | VOLTAGE CLAMP |  | OPTION                                       |  |
|-----------------|-------|---------------|--|--|--|
| 8 Volts         | 0 0 8 |               |  |  |  |
| 15 Volts        | 0 1 5 |               |  |  |  |
| 20 Volts        | 0 2 0 |               |  |  |  |
| 30 Volts        | 0 3 0 |               |  |  |  |
| 36 Volts        | 0 3 6 |               |  |  |  |
| 43 Volts        | 0 4 3 |               |  |  |  |
| 50 Volts        | 0 5 0 |               |  |  |  |
| 60 Volts        | 0 6 0 |               |  |  |  |
| *270 Volts      | 2 0 0 |               |  |  |  |
| • Not UL Listed |       |               |  |  |  |
|                 |       |               |  | no suffix                                    |  |
|                 |       |               |  | stage 2 clamp                                |  |
|                 |       |               |  | each line-to-ground                          |  |
|                 |       |               |  | stage 2 clamp                                |  |
|                 |       |               |  | line-to-line only                            |  |
|                 |       |               |  | stage 2 clamp                                |  |
|                 |       |               |  | line-to-line and each line to ground         |  |
|                 |       |               |  | low capacitance option stage                 |  |
|                 |       |               |  | 2 clamp line-to-line and each line to ground |  |
|                 |       |               |  | <b>OPTION:</b>                               |  |
|                 |       |               |  | DIN Rail Kit Available                       |  |
|                 |       |               |  | Order Part # 11604KIT-PC                     |  |

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